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N.
4/13/99



13 April '99

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**Re: Revised Remedial Action at the Enviro-Chem Site, Zionsville, Indiana
Summary of Round # 1/Baseline SVE System Sampling**

Dear Sirs:

Enclosed is a copy of the Round #1/Baseline SVE System Trench sampling data.

If you have any questions, please feel free to call me at (215) 788-7844, Extension 222.

Very truly yours,

G. J. Anastos, Ph.D., P.E.
Project Manager

enclosure

cc: R Ball (ENVIRON)
N Bernstein (NEB & A)

*Enviro-Chem RRA
Summary of Round # 1/Baseline SVE Sampling*

Background

In early January of 1999, round #1/baseline sampling of the Enviro-Chem SVE system, in Zionsville, Indiana, was conducted. As specified in Section 9 of the Enviro-Chem Superfund Site Quality Assurance Project Plan (QAPP), SVE vapors were sampled for volatile organic compounds (VOCs) using two charcoal tubes in series and analyzed using NIOSH methods 1500 and 1003 (modified). A total of 10 liters of vapor were pumped through the tubes at a rate of 0.2 liters per minute (50 minutes total). Samples for phenol were collected using XAD-7 dual sorbent tubes and analyzed using OSHA Method 32. A total of 10 liters of vapor were pumped through the tubes at a rate of 0.1 liters per minute (100 minutes total).

Individual samples for both VOCs and phenol were collected for each of the 42 manifolds on 1/5/99 and 1/6/99. In addition, samples of the combined flow from all 42 manifolds were collected daily for one week (i.e., seven combined flow daily samples collected on 1/5/99, 1/6/99, 1/7/99, 1/8/99, 1/10/99, and 1/11/99) and then weekly for three weeks (i.e., three combined flow weekly samples collected on 1/15/99, 1/22/99, and 1/29/99).

Results

A summary of the VOC sampling results for the front and back charcoal tubes are presented in Table 1. Only detected results are presented, and results which are above cleanup standards are bolded. Note that methylene chloride was the only compound detected in any of the back sections of the two sequential charcoal tubes, and it was only detected in the tubes for two manifolds (manifolds 6 and 8). Figure 1 identifies the location of the "native soil" manifolds and Figure 2 shows the location of the "backfilled soil" manifolds.

Initially, the laboratory neglected to analyze the VOC samples for three compounds for which cleanup levels exist. Specifically, the samples were not initially analyzed for 1,2-Dichloroethylene, 1,2-Dichlorobenzene, and Vinyl chloride. Data on these compounds should be available in the near future. In addition, the detection limits reported for 1,1,2-Trichloroethane, Tetrachloroethane, and Methylene chloride were higher than the cleanup standard. The laboratory is currently investigating whether a lower detection limit can be reported. Detailed analytical results are presented in Appendix A.

The results for phenol are presented in Table 2. None of the phenol results exceeded the cleanup standard. Detailed analytical results are presented in Appendix B.

Table 1. Baseline VOC Sampling Results for EnviroChem Site - January 1999

| Manifold # | Front Section | | | | | | | | | | | | | | | Back Section | | Total VOCs |
|------------------|---------------|-------|--------|--------|------------|--------|--------|--------|---------|-------------|--------|--------------|-----------|-----------|-----------|---------------|--------|------------|
| | Acetone | MC | DCA | MEK | Chloroform | TCA | TCE | MIBK | Toluene | 1,1,2 - TCA | PCE | Ethylbenzene | M-xylenes | P-xylenes | O-xylenes | Total Xylenes | MC | |
| 1 | | | | | 1.2 | 2.2 | 1.8 | | 0.62 | | | | 0.38 | | | | | 6.2 |
| 2 | | 1.4 | | | 110 | 900 | 140 | | 1.8 | 1.4 | 13 | 0.13 | 0.35 | | | | | 658.08 |
| 3 | | | | | 4.4 | 11 | 9.8 | | 0.71 | | 4.6 | | 0.4 | | | | | 30.91 |
| 4 | | 8.8 | | 1.8 | 76 | 82 | 48 | | 23 | 18 | 7.3 | 2.7 | 14 | 5 | 6.8 | | | 302.3 |
| 5 | | | | | 5.1 | 6.7 | 7.8 | | 4 | 2.3 | 2.3 | 0.83 | 4.6 | 1.7 | 2.5 | | | 39.83 |
| 6 | | 8.2 | | 0.85 | 39 | 70 | 36 | 1.5 | 11 | 7.4 | 6.6 | 1.7 | 9 | 3.5 | 4.7 | 0.66 | | 199.01 |
| 7 | | | | | 1.5 | 0.77 | 0.72 | | | | | | | | | | | 2.99 |
| 8 | 1.6 | 18 | | | 50 | 180 | 28 | | 1.4 | | | | | | | 1.5 | | 280.5 |
| 9 | | 1.6 | | | 10 | 14 | 8.4 | | 0.66 | | | | | | | | | 35.56 |
| 10 | | 30 | 1.5 | | 67 | 72 | 30 | | 0.96 | | | | | | | | | 201.46 |
| 11 | 0.53 | 2.3 | | | 17 | 7.1 | 10 | | 0.43 | | 0.8 | | | | | | | 38.16 |
| 12 | 0.52 | 1.3 | | | 5 | 6.8 | 4.4 | | 0.43 | | | | | | | | | 18.45 |
| 13 | 2.8 | 18 | | 0.94 | 47 | 86 | 17 | | 2.4 | | 1.3 | | | | | | | 152.14 |
| 14 | | 1.6 | | | 7.9 | 8.3 | 6.2 | | 0.76 | | | | | | | | | 23.66 |
| 15 | | | | | 19 | 19 | 22 | 0.29 | 2.9 | 1.8 | 6.3 | 0.22 | 1.3 | 0.5 | 0.68 | | | 72.79 |
| 16 | | | | | 2.7 | 4 | 5.1 | | 1.3 | 0.88 | 1.4 | 0.15 | 0.83 | 0.32 | 0.41 | | | 16.87 |
| 17 | | | | | 1.9 | 3.6 | 3.6 | | 1.1 | 0.47 | 0.71 | 0.19 | 1.1 | 0.44 | 0.63 | | | 13.64 |
| 18 | | | | | 3.6 | 2.7 | 2.2 | | 0.36 | | | | | | | | | 8.86 |
| 19 | | | | 0.48 | 4.1 | 9.8 | 3.8 | | 1 | 0.88 | 1.8 | 0.18 | 1 | 0.41 | 0.66 | | | 23.79 |
| 20 | | 0.85 | 0.45 | | 14 | 9.8 | 7 | | 0.42 | | 1 | | | | | | | 33.32 |
| 21 | | | | | 7.6 | 6.4 | 3.4 | | 1.8 | | | | | | | | | 19.9 |
| 22 | | | | | 3.8 | 4.4 | 2.6 | | 0.88 | | 0.62 | | | | | | | 12.2 |
| 23 | | | | | 0.92 | 4.1 | 2.2 | | 0.53 | | 1 | | 0.39 | | | | | 9.14 |
| 24 | | | | | 9.1 | 7.5 | 4 | | 0.52 | | 0.78 | | | | | | | 21.87 |
| 25 | | | | | 13 | 19 | 3.8 | | 0.41 | | 1.6 | | | | | | | 37.71 |
| 26 | 1.5 | 3.8 | 1.5 | 0.61 | 31 | 23 | 18 | | 4.2 | 2.1 | 3.2 | | 1.7 | 0.62 | 0.95 | | | 90.18 |
| 27 | | | | | 1.2 | 2.6 | 1 | | 0.58 | 0.4 | 1.8 | | 0.48 | | 0.3 | | | 8.16 |
| 28 | | | | | 1.6 | 13 | 0.96 | | 0.22 | | 0.71 | | | | | | | 16.48 |
| 29 | 2.8 | 12 | 0.93 | | 44 | 72 | 11 | | 5 | | 3.8 | 0.24 | 0.34 | 0.24 | 0.3 | | | 152.75 |
| 30 | | | | | 0.8 | 1.8 | 0.89 | | 0.64 | | 0.88 | | 0.36 | | 0.27 | | | 5.22 |
| 31 | | | | | 0.8 | 1.4 | 0.78 | | 0.36 | | | | | | | | | 3.34 |
| 32 | | | | | 1.8 | 2 | | | 0.61 | | 0.62 | | 0.4 | | 0.25 | | | 6.68 |
| 33 | | | | | 1.3 | 2.6 | | | 1.2 | 0.82 | 0.8 | 0.17 | 1 | 0.31 | 0.64 | | | 8.84 |
| 34 | | | | | 0.6 | 0.35 | | | 0.22 | | | | | | | | | 1.17 |
| 35 | | | | | 0.6 | 0.36 | | | 0.32 | | | | 0.27 | | 0.21 | | | 1.76 |
| 36 | | | | | 0.44 | | | | | | | | | | | | | 0.44 |
| 37 | | | | | 0.82 | | | | | | | | | | | | | 0.82 |
| 38 | | | | | 0.57 | 0.93 | | | 0.57 | | 0.88 | | 0.37 | | 0.26 | | | 3.46 |
| 39 | | | | | 0.8 | | | | | | | | | | | | | 0.6 |
| 40 | | | | | | | | | | | | | | | | | | 0 |
| 41 | | | | | | | | | | | | | | | | | | 0 |
| 42 | | | | | | | | | | | | | | | | | | 0 |
| C-1 | | | | | | | | | | | | | | | | | | 0 |
| C-2 | | | | | 1.8 | 3.1 | 1.8 | | 0.46 | | | | | | | | | 7.16 |
| C-3 | | | | | 0.31 | 0.52 | | | | | | | | | | | | 0.83 |
| C-4 | | | | | 1.2 | 1.4 | 0.72 | | 0.22 | | | | | | | | | 3.54 |
| C-5 | | | | | 1.2 | 1.6 | 0.85 | | 0.3 | | | | | | | | | 3.95 |
| C-6 | | | | | 1.6 | 2.1 | 1.6 | | 0.41 | | | | | | | | | 5.61 |
| C-7 | | | | | 1.6 | 2.3 | 1.8 | | 0.41 | | | | | | | | | 5.91 |
| CW-1 | | | | | 0.54 | 0.46 | | | | | | | | | | | | 1 |
| CW-2 | | | | | 0.3 | 0.42 | 0.27 | | | | | | | | | | | 0.99 |
| CW-3 | | | | | 0.55 | 0.82 | 0.61 | | | | | | | | | | | 1.98 |
| Detection Limit | 0.0062 | 0.022 | 0.0128 | 0.0068 | 0.0224 | 0.0220 | 0.0242 | 0.0090 | 0.0078 | 0.0216 | 0.0416 | 0.0056 | 0.0088 | 0.0068 | 0.0068 | NA | 0.0220 | NA |
| Cleanup Standard | 2.2 | 0.126 | NA | 0.4 | NA | 47.9 | 0.812 | 18.2 | 546.134 | 0.071 | 0.077 | 207.5 | NA | NA | NA | 5596.192 | NA | NA |

Notes: All units ppmv
 Only detected results shown (i.e., blank cell indicates non-detect result)
 Results in bold are above the cleanup standard

Key: MC = Methylene Chloride
 DCA = 1,1-Dichloroethane
 MEK = Methyl Ethyl Ketone
 TCA = 1,1,1-Trichloroethane
 TCE = Trichloroethylene
 MIBK = Methyl Isobutyl Ketone
 1,1,2-TCA = 1,1,2-Trichloroethane
 PCE = Tetrachloroethene
 C-1 = Combined flow daily sample #1
 C-2 = Combined flow daily sample #2
 C-3 = Combined flow daily sample #3
 C-4 = Combined flow daily sample #4
 C-5 = Combined flow daily sample #5
 C-6 = Combined flow daily sample #6
 C-7 = Combined flow daily sample #7
 CW-1 = Combined flow weekly sample #1
 CW-2 = Combined flow weekly sample #2
 CW-3 = Combined flow weekly sample #3

Table 2. Baseline Phenol Sampling Results for EnviroChem Site - January 1999

| Manifold # | Phenol |
|------------------|---------|
| 1 | <0.0033 |
| 2 | <0.0033 |
| 3 | <0.0033 |
| 4 | <0.0033 |
| 5 | <0.0033 |
| 6 | <0.0033 |
| 7 | <0.0033 |
| 8 | <0.0033 |
| 9 | <0.0033 |
| 10 | <0.0033 |
| 11 | <0.0033 |
| 12 | <0.0033 |
| 13 | <0.0033 |
| 14 | <0.0033 |
| 15 | <0.0033 |
| 16 | <0.0033 |
| 17 | <0.0033 |
| 18 | <0.0033 |
| 19 | <0.0033 |
| 20 | <0.0033 |
| 21 | <0.0033 |
| 22 | <0.0033 |
| 23 | <0.0033 |
| 24 | <0.0033 |
| 25 | <0.0033 |
| 26 | <0.0033 |
| 27 | 0.015 |
| 28 | <0.0033 |
| 29 | 0.02 |
| 30 | <0.0033 |
| 31 | <0.0033 |
| 32 | 0.019 |
| 33 | 0.019 |
| 34 | 0.015 |
| 35 | <0.0033 |
| 36 | 0.043 |
| 37 | <0.0033 |
| 38 | <0.0033 |
| 39 | 0.016 |
| 40 | 0.02 |
| 41 | <0.0033 |
| 42 | <0.0033 |
| C-1 | <0.0033 |
| C-2 | <0.0033 |
| C-3 | <0.0033 |
| C-4 | 0.017 |
| C-5 | 0.022 |
| C-6 | <0.0033 |
| C-7 | <0.0033 |
| CW-1 | <0.0033 |
| CW-2 | <0.0033 |
| CW-3 | <0.0033 |
| Cleanup Standard | 51.68 |

Note: All units ppmv

Key: C-1 = Combined flow daily sample #1 C-6 = Combined flow daily sample #6
 C-2 = Combined flow daily sample #2 C-7 = Combined flow daily sample #7
 C-3 = Combined flow daily sample #3 CW-1 = Combined flow weekly sample #1
 C-4 = Combined flow daily sample #4 CW-2 = Combined flow weekly sample #2
 C-5 = Combined flow daily sample #5 CW-3 = Combined flow weekly sample #3

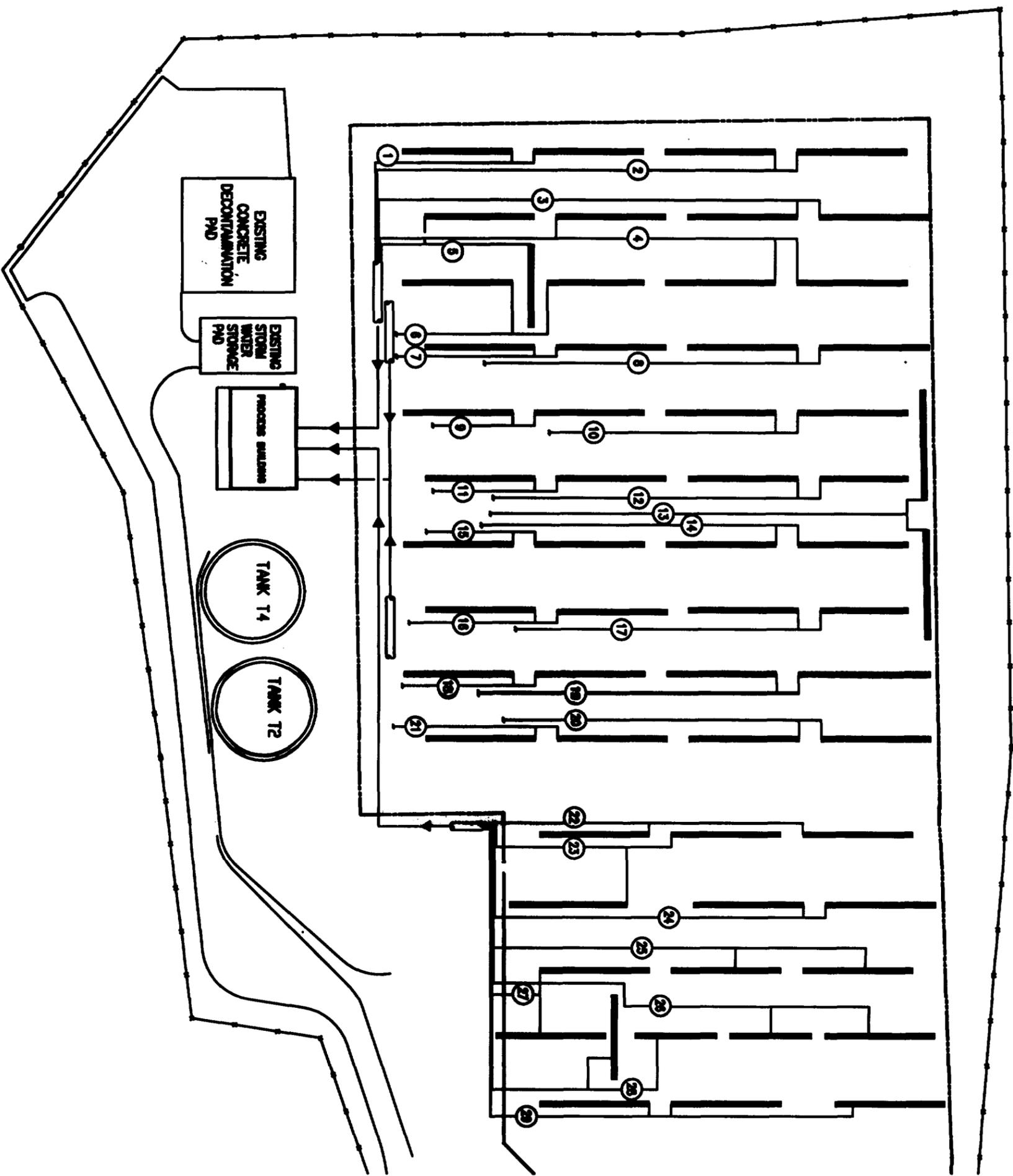


FIGURE 1

| | | | |
|--|------|----------|---|
| DESIGNED BY | DATE | 08/28/97 | ENVIRO-CHEM SUPERFUND SITE PHASE 1 SYE TRENCHES NATIVE SOIL MANIFOLDS |
| DRAWN | TJV | 04/28/99 | |
| CHECKED | CS | 04/28/99 | |
| WCH 1500 FROST ROAD, SUITE 110 CHAMBERSBURG, PA 17044 (717) 326-1944 | | | PROJECT NO. 2709 DRAWING NO. 270902Z SCALE SHEET 07 |

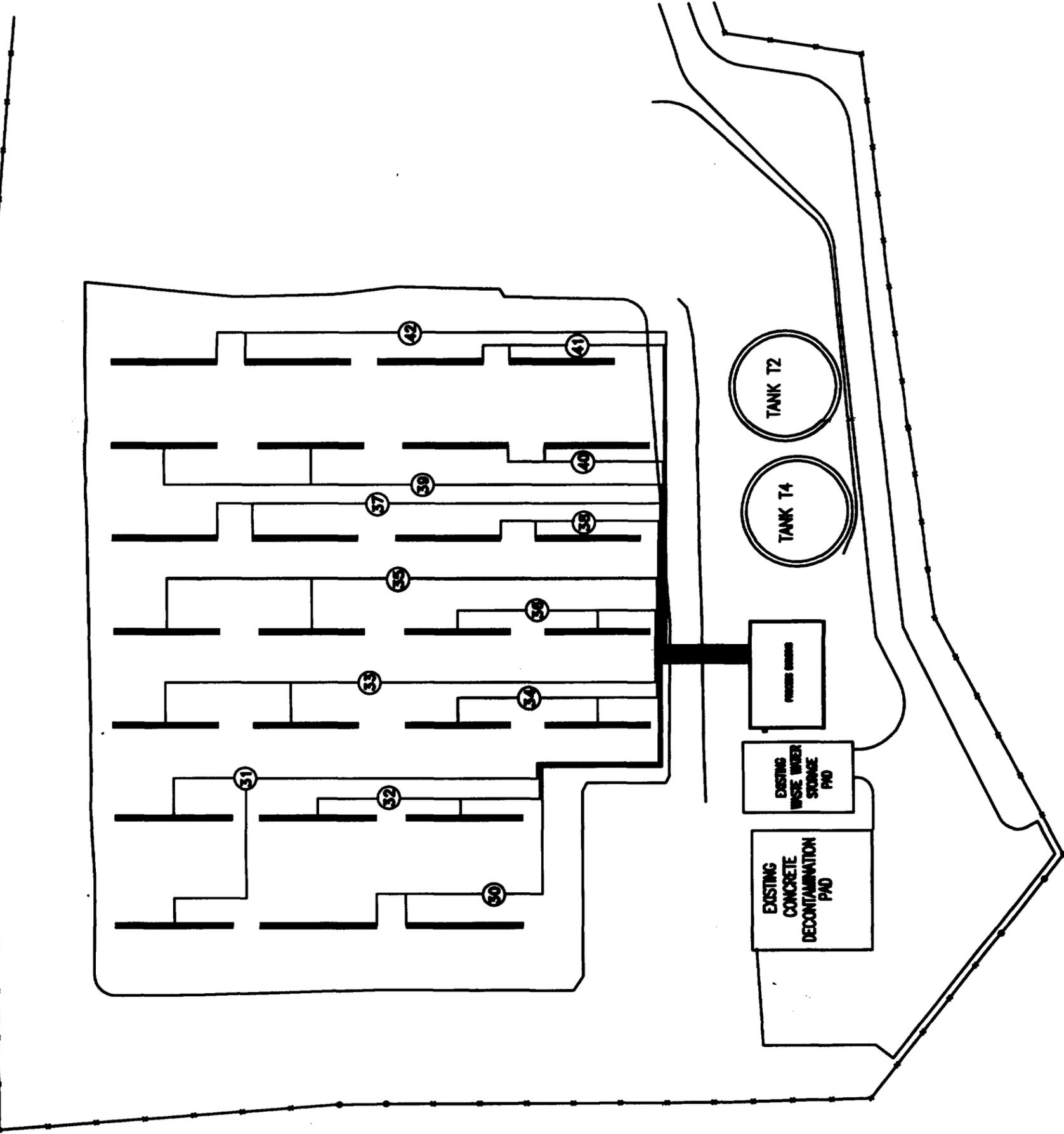


FIGURE 2

| | | | |
|-------------|------|----------|-------------------------|
| DESIGNED BY | DATE | 09/29/07 | ENVIRO-CHEM |
| DRAWN BY | DATE | 04/25/08 | SUPERFUND SITE |
| CHECKED BY | DATE | 4/26/08 | PHASE 1 SVE AREAS |
| | | | BACKFILL SOIL MANIFOLDS |
| | | | PROJECT NO. 3700 |
| | | | DRAWING NO. 3700032 |
| | | | SCALE 1/8" = 1'-0" |
| | | | SHEET 07 |
| | | | OF |

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Appendix A

Detailed VOC Analytical Results

Case Narrative for 17 Volatile Compounds Trapped by Charcoal Tubes

Charcoal Tube for 17 Volatile Compounds

Invoice No. JPB9901006

Two sections were analyzed for each sample. These two sections are front and back section.

The front section is the section first contacted with air during sampling. After front section, the sampled

air then entered the back section. Each of these two sections was separately extracted with 3mL of CS₂

and analyzed by a GC/FID using both DB-5 and DB-WAX columns. Each section will be billed as separate sample.

Time of Sampling is 50 minutes with total air volume 10 liters through each sampling tube, except blank.

| Field ID | Sample Description | Lab Number | Date of sampling | Date of Sample Receipt | Date of Extraction |
|----------|----------------------|------------|------------------|------------------------|--------------------|
| 1 | Log 1 | 8VA002-01 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 2 | Log 2 | 8VA002-02 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 3 | Log 3 | 8VA002-03 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 4 | Log 4 | 8VA002-04 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 5 | Log 5 | 8VA002-05 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 6 | Log 6 | 8VA002-06 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 7 | Log 7 | 8VA002-07 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 8 | Log 8 | 8VA002-08 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 9 | Log 9 | 8VA002-09 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 10 | Log 10 | 8VA002-10 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 11 | Log 11 | 8VA002-11 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 12 | Log 12 | 8VA002-12 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 13 | Log 13 | 8VA002-13 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 14 | Log 14 | 8VA002-14 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 15 | Log 15 | 8VA002-15 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 16 | Log 16 | 8VA002-16 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 17 | Log 17 | 8VA002-17 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 18 | Log 18 | 8VA002-18 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 19 | Log 19 | 8VA002-19 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 20 | Log 20 | 8VA002-20 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| 21 | Log 21 | 8VA002-21 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 22 | Log 22 | 8VA002-22 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 23 | Log 23 | 8VA002-23 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 24 | Log 24 | 8VA002-24 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 25 | Log 25 | 8VA002-25 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 26 | Log 26 | 8VA002-26 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 27 | Log 27 | 8VA002-27 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 28 | Log 28 | 8VA002-28 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 29 | Log 29 | 8VA002-29 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 30 | Log 30 | 8VA002-30 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 31 | Log 31 | 8VA002-31 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 32 | Log 32 | 8VA002-32 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 33 | Log 33 | 8VA002-33 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 34 | Log 34 | 8VA002-34 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 35 | Log 35 | 8VA002-35 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 36 | Log 36 | 8VA002-36 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 37 | Log 37 | 8VA002-37 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 38 | Log 38 | 8VA002-38 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 39 | Log 39 | 8VA002-39 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 40 | Log 40 | 8VA002-40 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 41 | Log 41 | 8VA002-41 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| 42 | Log 42 | 8VA002-42 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| C-1 | Combined Flow Day 1 | 8VA002-43 | 1/5/1999 | 1/18/1999 | 1/24/1999 |
| C-2 | Combined Flow Day 2 | 8VA002-44 | 1/6/1999 | 1/18/1999 | 1/24/1999 |
| C-3 | Combined Flow Day 3 | 8VA002-45 | 1/7/1999 | 1/18/1999 | 1/24/1999 |
| C-4 | Combined Flow Day 4 | 8VA002-46 | 1/8/1999 | 1/18/1999 | 1/24/1999 |
| C-5 | Combined Flow Day 5 | 8VA002-47 | 1/9/1999 | 1/18/1999 | 1/24/1999 |
| C-6 | Combined Flow Day 6 | 8VA002-48 | 1/10/1999 | 1/18/1999 | 1/24/1999 |
| C-7 | Combined Flow Day 7 | 8VA002-49 | 1/11/1999 | 1/18/1999 | 1/24/1999 |
| Blank | Blank | 8VA002-50 | 1/8/1999 | 1/18/1999 | 1/24/1999 |
| CW-1 | Combined Flow Week 1 | 8VA004-01 | 1/15/1999 | 2/1/1999 | 2/4/1999 |
| CW-2 | Combined Flow Week 2 | 8VA004-02 | 1/22/1999 | 2/1/1999 | 2/4/1999 |
| CW-3 | Combined Flow Week 3 | 8VA004-03 | 1/29/1999 | 2/1/1999 | 2/4/1999 |

1. For each sample, both total amount found in mg and conc. in ppmv of each compound found are reported. The assumption of the sampling temperature and pressure are 25°C and 760mmHg, respectively.

2. Two columns, DB-5 and DB-WAX, were used for analysis. For analysis using DB-5,
- 2.a. methylene chloride eluted close to carbon disulfide,
 - 2.b. chlorobenzene and ethylbenzene coeluted,
 - 2.c. m-xylene and p-xylene coeluted.

Therefore, DB-WAX was used for the quantitation of methylene chloride, chlorobenzene, ethylbenzene, o-, m- and p-xylenes.

For other compounds, DB-5 was used for quantitation. However, the conc. found in both columns were compared carefully before reported. For all the concentrations reported, the concentrations found in both columns were close and comparable.

3. For analysis using DB-WAX,

- 3.a. dichloroethylene coeluted close to carbon disulfide,
- 3.b. trichloroethene coeluted with chloroform.
- 3.c. The retention of later eluters were changed after initial calibration. However, the retention times were not changed since. Therefore, the retention times of the following continuous calibration were used for identification.

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID | | Blank |
| Laboratory Number | 8VA002-50 | | Sample Description | | Blank |
| Extraction Date | 1/24/99 | | Sample Date | | 1/8/99 |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters)**** | | 10 |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | | 50 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 011F0101.D | 019F0101.D | 020F0101.D | 020F0101.D | File ID |
| Acquired on | 2/1/99 20:09 | 2/2/99 21:58 | 2/1/99 20:20 | 2/2/99 22:15 | Acquired on |
| Surrogate Recovery | 85% | 81% | 96% | 98% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | <0.0224 | <0.46 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | <0.0220 | <0.40 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| ****No air was sampled through the blank tube. However, for comparison purpose, a 10 liter of zero air was assumed to be sampled through the blank tube. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|---------------------|--------------------------|
| | | | | Field Sample ID | C2 |
| Laboratory Number | 8VA002-44 | | Sample Description | Combined Flow Day 2 | |
| Extraction Date | 1/24/99 | | Sample Date | 1/6/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | 60 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 024F0101.D | 024F0101.D | 025F0101.D | 025F0101.D | File ID |
| Acquired on | 2/1/99 22:08 | 2/2/99 23:23 | 2/1/99 22:19 | 2/2/99 23:39 | Acquired on |
| Surrogate Recovery | 75% | 91% | 68% | 84% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 9.0E-02 | 1.8E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 1.7E-01 | 3.1E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 9.6E-02 | 1.8E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.7E-02 | 4.6E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID C3 | | |
| Laboratory Number | 8VA002-45 | | Sample Description | | Combined Flow Day 3 |
| Extraction Date | 1/24/99 | | Sample Date | | 1/7/99 |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | | 10 |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | | 60 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 026F0101.D | 026F0101.D | 027F0101.D | 027F0101.D | File ID |
| Acquired on | 2/1/99 22:30 | 2/2/99 23:56 | 2/1/99 22:40 | 2/3/99 12:13 | Acquired on |
| Surrogate Recovery | 88% | 94% | 86% | 66% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 1.5E-02 | 3.1E-01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.9E-02 | 6.2E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|---------------------|--------------------------|
| | | | | Field Sample ID | C7 |
| Laboratory Number | 8VA002-49 | | Sample Description | Combined Flow Day 7 | |
| Extraction Date | 1/24/99 | | Sample Date | 1/11/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 035F0101.D | 035F0101.D | 036F0101.D | 036F0101.D | File ID |
| Acquired on | 2/2/99 12:05 | 2/3/99 2:24 | 2/2/99 0:16 | 2/3/99 2:41 | Acquired on |
| Surrogate Recovery | 60% | 72% | 71% | 85% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 7.8E-02 | 1.6E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 1.2E-01 | 2.3E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 8.7E-02 | 1.6E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.6E-02 | 4.1E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|----------------------------|-------------------|--------------|--------------------------|
| | | | Field Sample ID 1 | | |
| Laboratory Number 8VA002-1 | | Sample Description Leg 1 | | | |
| Extraction Date 1/24/99 | | Sample Date 1/5/99 | | | |
| CS ₂ Used in Extraction (mL) 3 | | Air Volume (Liters) 10 | | | |
| Date of Sample receipt 1/18/99 | | Sampling Time (Minutes) 60 | | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 037F0101.D | 037F0101.D | 038F0101.D | 038F0101.D | File ID |
| Acquired on | 2/2/99 0:26 | 2/3/99 2:57 | 2/2/99 0:37 | 2/3/99 3:13 | Acquired on |
| Surrogate Recovery | 45% | 69% | 68% | 74% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-89.SEQ | 02-02-99.SEQ | 02-01-89.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 6.0E-02 | 1.2E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 1.2E-01 | 2.2E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 9.9E-02 | 1.8E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 2.3E-02 | 6.2E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 1.7E-02 | 3.8E-01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|----------------|----------------------------|-------------------|---------------|--------------------------|
| | | | Field Sample ID 2 | | |
| Laboratory Number 8VA002-2 | | Sample Description Leg 2 | | | |
| Extraction Date 1/24/1999 | | Sample Date 1/5/1999 | | | |
| CS ₂ Used in Extraction (mL) 3 | | Air Volume (Liters) 10 | | | |
| Date of Sample receipt 1/18/1999 | | Sampling Time (Minutes) 50 | | | |
| | | Front Section | | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 039F0101.D | 039F0101.D | 040F0101.D | 040F0101.D | File ID |
| Acquired on | 2/2/1999 0:47 | 2/3/1999 3:30 | 2/2/1999 0:58 | 2/3/1999 3:46 | Acquired on |
| Surrogate Recovery | 78% | 76% | 57% | 78% | Surrogate Recovery |
| Initial Calibration Date | 2/1/1999 | 2/2/1999 | 2/1/1999 | 2/2/1999 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | | Front Section | | Back Section | |
| | | Total Amount | | Total Amount | |
| | | Conc. in*** | | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 4.8E-02 | 1.4E+00 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 5.6E+00 | 1.1E+02 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.1E+01 | 3.9E+02 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 7.7E+00 | 1.4E+02 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 6.9E-02 | 1.8E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | 7.5E-02 | 1.4E+00 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 8.7E-01 | 1.3E+01 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | 5.7E-03 | 1.3E-01 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 1.5E-02 | 3.5E-01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| ****The concentrations of chloroform, 1,1,1-trichloroethane and trichloroethylene in the front section were obtained from the following dilution analysis. | | | | | |
| Dilution Analysis | | | | | |
| Front Section | | | | | |
| Column | DB-5* | | | | |
| File ID | 008F0101.D | | | | |
| Acquired on | 3/1/1999 16:14 | | | | |
| Initial Calibration Date | 3/1/1999 | | | | |
| Sequence | 03-01-99.SEQ | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID 3 | | |
| Laboratory Number | 8VA002-3 | | Sample Description | Leg 3 | |
| Extraction Date | 1/24/99 | | Sample Date | 1/5/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 041F0101.D | 041F0101.D | 042F0101.D | 042F0101.D | File ID |
| Acquired on | 2/2/99 1:08 | 2/3/99 4:02 | 2/2/99 1:19 | 2/3/99 4:18 | Acquired on |
| Surrogate Recovery | 62% | 76% | 68% | 92% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 2.2E-01 | 4.4E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 6.1E-01 | 1.1E+01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 5.3E-01 | 9.9E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 2.7E-02 | 7.1E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 3.1E-01 | 4.6E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 1.7E-02 | 4.0E-01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 1.1E-02 | 2.4E-01 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|----------------|----------------------------|-------------------|------------------|--------------------------|
| | | | Field Sample ID 4 | | |
| Laboratory Number 8VA002-4 | | Sample Description Leg 4 | | | |
| Extraction Date 1/24/1999 | | Sample Date 1/5/1999 | | | |
| CS ₂ Used in Extraction (mL) 3 | | Air Volume (Liters) 10 | | | |
| Date of Sample receipt 1/18/1999 | | Sampling Time (Minutes) 50 | | | |
| Front Section | | Front Section | | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 043F0101.D | 043F0101.D | 045F0101.D | 045F0101.D | File ID |
| Acquired on | 2/2/1999 1:29 | 2/3/1999 4:35 | 2/2/1999 1:50 | 2/3/1999 5:07 | Acquired on |
| Surrogate Recovery | 112% | 81% | 41% | 76% | Surrogate Recovery |
| Initial Calibration Date | 2/1/1999 | 2/2/1999 | 2/1/1999 | 2/2/1999 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| Front Section | | Front Section | | Back Section | |
| Total Amount | | Conc. in*** | | Total Amount | |
| Per Tube, mg | | ppm (v/v) | | Per Tube, mg | |
| Target Compounds | | Target Compounds | | Target Compounds | |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 3.3E-01 | 9.6E+00 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | 5.7E-02 | 1.9E+00 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 3.7E+00 | 7.6E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 5.1E+00 | 9.2E+01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 2.6E+00 | 4.8E+01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 8.5E-01 | 2.3E+01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | 8.6E-01 | 1.6E+01 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 5.0E-01 | 7.3E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | 1.2E-01 | 2.7E+00 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 6.1E-01 | 1.4E+01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | 2.2E-01 | 5.0E+00 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 2.9E-01 | 6.8E+00 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| ****The concentration of 1,1,1-trichloroethane in the front section was obtained from the following dilution analysis. | | | | | |
| Dilution Analysis | | | | | |
| Front Section | | | | | |
| Column | DB-5* | | | | |
| File ID | 010F0101.D | | | | |
| Acquired on | 3/1/1999 16:41 | | | | |
| Initial Calibration Date | 3/1/1999 | | | | |
| Sequence | 03-01-99.SEQ | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|--------------|-------------------------|--------------------------|
| | | | | Field Sample ID | 6 |
| Laboratory Number | 8VA002-6 | | | Sample Description | Leg 6 |
| Extraction Date | 1/24/99 | | | Sample Date | 1/6/99 |
| CS ₂ Used In Extraction (mL) | 3 | | | Air Volume (Liters) | 10 |
| Date of Sample receipt | 1/18/99 | | | Sampling Time (Minutes) | 50 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-6* | DB-WAX** | DB-6* | DB-WAX** | Column |
| File ID | 046F0101.D | 043F0101.D | 047F0101.D | 047F0101.D | File ID |
| Acquired on | 2/2/99 2:01 | 2/3/99 4:35 | 2/2/99 2:11 | 2/3/99 6:39 | Acquired on |
| Surrogate Recovery | 58% | 81% | 58% | 87% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 2.6E-01 | 5.1E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 4.7E-01 | 8.7E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 4.2E-01 | 7.8E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.5E-01 | 4.0E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | 1.2E-01 | 2.3E+00 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 1.5E-01 | 2.3E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | 3.6E-02 | 8.3E-01 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 2.0E-01 | 4.6E+00 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | 7.5E-02 | 1.7E+00 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 1.1E-01 | 2.5E+00 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|-------------------|---------------|-------------------------|---------------|--------------------------|
| | | | Field Sample ID | | 6 |
| Laboratory Number | 8VA002-6 | | Sample Description | | Leg 6 |
| Extraction Date | 1/24/1999 | | Sample Date | | 1/5/1999 |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | | 10 |
| Date of Sample receipt | 1/18/1999 | | Sampling Time (Minutes) | | 60 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 048F0101.D | 043F0101.D | 049F0101.D | 047F0101.D | File ID |
| Acquired on | 2/2/1999 2:22 | 2/3/1999 4:35 | 2/2/1999 2:32 | 2/3/1999 5:39 | Acquired on |
| Surrogate Recovery | 73% | 85% | 64% | 68% | Surrogate Recovery |
| Initial Calibration Date | 2/1/1999 | 2/2/1999 | 2/1/1999 | 2/2/1999 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 3.2E-01 | 9.2E+00 | 2.3E-02 | 6.6E-01 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | 2.5E-02 | 8.5E-01 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 1.9E+00 | 3.9E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 3.8E+00 | 7.0E+01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.9E+00 | 3.5E+01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | 6.0E-02 | 1.5E+00 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 4.1E-01 | 1.1E+01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | 4.1E-01 | 7.4E+00 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 3.8E-01 | 5.5E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | 7.5E-02 | 1.7E+00 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 3.9E-01 | 9.0E+00 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | 1.5E-01 | 3.5E+00 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 2.0E-01 | 4.7E+00 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| ****The concentrations of chloroform, 1,1,1-trichloroethane and trichloroethylene in the front section were obtained from the following dilution analysis. | | | | | |
| | Dilution Analysis | | | | |
| | Front Section | | | | |
| Column | DB-5* | | | | |
| File ID | 011F0101.D | | | | |
| Acquired on | 3/1/1999 16:53 | | | | |
| Initial Calibration Date | 3/1/1999 | | | | |
| Sequence | 03-01-99.SEQ | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID 7 | | |
| Laboratory Number | 8VA002-7 | | Sample Description | | Leg 7 |
| Extraction Date | 1/24/99 | | Sample Date | | 1/5/99 |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | | 10 |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | | 60 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 050F0101.D | 050F0101.D | 051F0101.D | 051F0101.D | File ID |
| Acquired on | 2/2/99 2:42 | 2/3/99 6:28 | 2/2/99 2:53 | 2/3/99 6:44 | Acquired on |
| Surrogate Recovery | 53% | 54% | 106% | 110% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 7.5E-02 | 1.5E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 4.2E-02 | 7.7E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 3.9E-02 | 7.2E-01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|-------------------|---------------|-------------------------|-----------------|--------------------------|
| | | | | Field Sample ID | 8 |
| Laboratory Number | 8VA002-8 | | Sample Description | Leg 8 | |
| Extraction Date | 1/24/1999 | | Sample Date | 1/5/1999 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/1999 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 052F0101.D | 052F0101.D | 053F0101.D | 051F0101.D | File ID |
| Acquired on | 2/2/1999 3:03 | 2/3/1999 7:00 | 2/2/1999 3:14 | 2/3/1999 6:44 | Acquired on |
| Surrogate Recovery | 48% | 53% | 78% | 65% | Surrogate Recovery |
| Initial Calibration Date | 2/1/1999 | 2/2/1999 | 2/1/1999 | 2/2/1999 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | 3.9E-02 | 1.6E+00 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 6.3E-01 | 1.8E+01 | 5.1E-02 | 1.5E+00 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 2.5E+00 | 5.0E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 9.8E+00 | 1.8E+02 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.5E+00 | 2.8E+01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 5.4E-02 | 1.4E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| ****The concentrations of chloroform, 1,1,1-trichloroethane and trichloroethylene in the front section were obtained from the following dilution analysis. | | | | | |
| | Dilution Analysis | | | | |
| | Front Section | | | | |
| Column | DB-5* | | | | |
| File ID | 012F0101.D | | | | |
| Acquired on | 3/1/1999 17:05 | | | | |
| Initial Calibration Date | 3/1/1999 | | | | |
| Sequence | 03-01-99.SEQ | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|----------------|----------------------------|--------------------|---------------|--------------------------|
| | | | Field Sample ID 10 | | |
| Laboratory Number 8VA002-10 | | Sample Description Leg 10 | | | |
| Extraction Date 1/24/1999 | | Sample Date 1/6/1999 | | | |
| CS ₂ Used in Extraction (mL) 3 | | Air Volume (Liters) 10 | | | |
| Date of Sample receipt 1/18/1999 | | Sampling Time (Minutes) 50 | | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 057F0101.D | 057F0101.D | 058F0101.D | 058F0101.D | File ID |
| Acquired on | 2/2/1999 3:55 | 2/3/1999 8:21 | 2/2/1999 4:06 | 2/3/1999 8:37 | Acquired on |
| Surrogate Recovery | 70% | 70% | 111% | 67% | Surrogate Recovery |
| Initial Calibration Date | 2/1/1999 | 2/2/1999 | 2/1/1999 | 2/2/1999 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 1.0E+00 | 3.0E+01 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | 5.4E-02 | 1.5E+00 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 3.3E+00 | 6.7E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 3.9E+00 | 7.2E+01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.6E+00 | 3.0E+01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 3.6E-02 | 9.6E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of samling is 25°C and pressure 760mmHg. | | | | | |
| ****The concentrations of chloroform, 1,1,1-trichloroethane and trichloroethylene in the front section were obtained from the following dilution analysis. | | | | | |
| Dilution Analysis | | | | | |
| Front Section | | | | | |
| Column | DB-5* | | | | |
| File ID | 013F0101.D | | | | |
| Acquired on | 3/1/1999 17:17 | | | | |
| Initial Calibration Date | 3/1/1999 | | | | |
| Sequence | 03-01-99.SEQ | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID 14 | | |
| Laboratory Number | 8VA002-14 | | Sample Description | | Leg 14 |
| Extraction Date | 1/24/99 | | Sample Date | | 1/5/99 |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | | 10 |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | | 50 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 065F0101.D | 065F0101.D | 067F0101.D | 067F0101.D | File ID |
| Acquired on | 2/2/99 9:27 | 2/3/99 10:33 | 2/2/99 9:48 | 2/3/99 11:23 | Acquired on |
| Surrogate Recovery | 108% | 106% | 129% | 95% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 5.1E-02 | 1.5E+00 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 3.8E-01 | 7.9E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 4.8E-01 | 8.3E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 2.8E-01 | 5.2E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 2.9E-02 | 7.6E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|----------------------------|--------------|--------------------------|
| | | | Field Sample ID 18 | | |
| Laboratory Number 8VA002-16 | | | Sample Description Leg 16 | | |
| Extraction Date 1/24/99 | | | Sample Date 1/6/99 | | |
| CS ₂ Used in Extraction (mL) 3 | | | Air Volume (Liters) 10 | | |
| Date of Sample receipt 1/18/99 | | | Sampling Time (Minutes) 60 | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 070F0101.D | 070F0101.D | 071F0101.D | 071F0101.D | File ID |
| Acquired on | 2/2/99 10:20 | 2/3/99 0:14 | 2/2/99 10:31 | 2/3/99 12:32 | Acquired on |
| Surrogate Recovery | 59% | 52% | 52% | 57% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 1.3E-01 | 2.7E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.2E-01 | 4.0E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 2.7E-01 | 5.1E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 4.8E-02 | 1.3E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | 3.6E-02 | 6.6E-01 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 9.6E-02 | 1.4E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | 6.3E-03 | 1.6E-01 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 3.6E-02 | 8.3E-01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | 1.4E-02 | 3.2E-01 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 1.8E-02 | 4.1E-01 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID | | 20 |
| Laboratory Number | | 8VA002-20 | Sample Description | | Leg 20 |
| Extraction Date | | 1/24/99 | Sample Date | | 1/6/99 |
| CS ₂ Used in Extraction (mL) | | 3 | Air Volume (Liters) | | 10 |
| Date of Sample receipt | | 1/18/99 | Sampling Time (Minutes) | | 60 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 079F0101.D | 076F0101.D | 080F0101.D | 080F0101.D | File ID |
| Acquired on | 2/2/99 11:58 | 2/3/99 2:03 | 2/2/99 0:09 | 2/3/99 15:17 | Acquired on |
| Surrogate Recovery | 123% | 129% | 115% | 120% | Surrogate Recovery |
| Initial Calibration Date | 2/1/99 | 2/2/99 | 2/1/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 02-01-99.SEQ | 02-02-99.SEQ | 02-01-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 2.3E-02 | 6.5E-01 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | 1.6E-02 | 4.5E-01 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 6.8E-01 | 1.4E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 5.3E-01 | 9.8E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 3.8E-01 | 7.0E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.6E-02 | 4.2E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 6.9E-02 | 1.0E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|-----------------|----------------|-----------------|-------------------------|--------------------------|
| Laboratory Number | 8VA002-21 | | | Field Sample ID | 21 |
| Extraction Date | 1/24/1999 | | | Sample Description | Leg 21 |
| CS ₂ Used in Extraction (mL) | 3 | | | Sample Date | 1/6/1999 |
| Date of Sample receipt | 1/18/1999 | | | Air Volume (Liters) | 10 |
| | | | | Sampling Time (Minutes) | 60 |
| Column | Front Section | Front Section | Back Section | Back Section | Column |
| File ID | DB-5* | DB-WAX** | DB-5* | DB-WAX** | File ID |
| Acquired on | 011F0101.D | 001F0101.D | 012F0101.D | 002F0101.D | Acquired on |
| Surrogate Recovery | 1/30/1999 13:33 | 2/3/1999 15:36 | 1/30/1999 13:44 | 2/3/1999 15:54 | Surrogate Recovery |
| Initial Calibration Date | 86% | 103% | 72% | 78% | Initial Calibration Date |
| Sequence | 1/30/1999 | 2/2/1999 | 1/30/1999 | 2/2/1999 | |
| | 01-30-09.SEQ | 02-02-09.SEQ | 01-30-09.SEQ | 02-02-09.SEQ | |
| Target Compounds | Front Section | Front Section | Back Section | Back Section | Target Compounds |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | |
| ACETONE | <0.0062 | <0.35 | <0.0062 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 3.7E-01 | 7.8E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 3.8E-01 | 6.4E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.8E-01 | 3.3E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 8.9E-02 | 1.8E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 4.8E-02 | 7.1E-01 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |

* DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column.
 ** DB-WAX is a 30 meters long, 0.63mm OD 1.5um DB-WAX film thickness megabore column.
 *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg.

1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used.
 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen. and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds.

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|---------------|-------------------------|-----------------|--------------------------|
| | | | | Field Sample ID | 22 |
| Laboratory Number | 8VA002-22 | | Sample Description | Leg 22 | |
| Extraction Date | 1/24/99 | | Sample Date | 1/6/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 013F0101.D | 083F0101.D | 014F0101.D | 084F0101.D | File ID |
| Acquired on | 1/30/99 13:56 | 2/3/99 16:13 | 1/30/99 14:08 | 2/3/99 16:31 | Acquired on |
| Surrogate Recovery | 86% | 103% | 88% | 109% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/2/99 | 1/30/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-02-99.SEQ | 01-30-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 1.9E-01 | 3.8E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.4E-01 | 4.4E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.3E-01 | 2.5E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 3.3E-02 | 8.8E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 4.2E-02 | 6.2E-01 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylebenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|---------------|---------------|-------------------------|--------------------------|
| | | | | Field Sample ID | 23 |
| Laboratory Number | 8VA002-23 | | | Sample Description | Leg 23 |
| Extraction Date | 1/24/99 | | | Sample Date | 1/6/99 |
| CS ₂ Used in Extraction (mL) | 3 | | | Air Volume (Liters) | 10 |
| Date of Sample receipt | 1/18/99 | | | Sampling Time (Minutes) | 60 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 016F0101.D | 085F0101.D | 016F0101.D | 084F0101.D | File ID |
| Acquired on | 1/30/99 14:20 | 2/3/99 16:49 | 1/30/99 14:32 | 2/3/99 16:31 | Acquired on |
| Surrogate Recovery | 56% | 62% | 69% | 69% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/2/99 | 1/30/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-02-99.SEQ | 01-30-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 4.5E-02 | 9.2E-01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.2E-01 | 4.1E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.2E-01 | 2.2E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 2.0E-02 | 5.3E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 6.9E-02 | 1.0E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 1.7E-02 | 3.9E-01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of samling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column, DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID 24 | | |
| Laboratory Number | 8VA002-24 | | Sample Description | | Leg 24 |
| Extraction Date | 1/24/99 | | Sample Date | | 1/6/99 |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | | 10 |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | | 50 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 017F0101.D | 085F0101.D | 018F0101.D | 084F0101.D | File ID |
| Acquired on | 1/30/99 14:44 | 2/3/99 16:49 | 1/30/99 14:56 | 2/3/99 16:31 | Acquired on |
| Surrogate Recovery | 90% | 81% | 77% | 64% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/2/99 | 1/30/99 | 2/2/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-02-99.SEQ | 01-30-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 4.4E-01 | 9.1E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 4.1E-01 | 7.5E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 2.2E-01 | 4.0E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 2.0E-02 | 5.2E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 5.1E-02 | 7.5E-01 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|---------------|----------------------------|--------------|--------------------------|
| | | | Field Sample ID 25 | | |
| Laboratory Number | 8VA002-25 | | Sample Description Leg 25 | | |
| Extraction Date | 1/24/99 | | Sample Date 1/6/99 | | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) 10 | | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) 50 | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 019F0101.D | 009F0101.D | 020F0101.D | 010F0101.D | File ID |
| Acquired on | 1/30/99 15:08 | 2/3/99 21:36 | 1/30/99 15:20 | 2/3/99 21:54 | Acquired on |
| Surrogate Recovery | 83% | 92% | 83% | 78% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-03-99.SEQ | 01-30-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 2.8E-02 | 8.0E-01 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | 1.6E-02 | 4.6E-01 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 6.4E-01 | 1.3E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 1.1E+00 | 1.9E+01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 2.0E-01 | 3.8E+00 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.5E-02 | 4.1E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 9.9E-02 | 1.5E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of samling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylebenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|---------------|-------------------------|-----------------|--------------------------|
| | | | | Field Sample ID | 26 |
| Laboratory Number | 8VA002-26 | | Sample Description | Leg 26 | |
| Extraction Date | 1/24/99 | | Sample Date | 1/6/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 023F0101.D | 011F0101.D | 024F0101.D | 012F0101.D | File ID |
| Acquired on | 1/30/99 15:56 | 2/3/99 22:11 | 1/30/99 16:07 | 2/3/99 22:28 | Acquired on |
| Surrogate Recovery | 58% | 56% | 78% | 54% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-03-99.SEQ | 01-30-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | 3.6E-02 | 1.5E+00 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 1.4E-01 | 3.9E+00 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | 5.4E-02 | 1.5E+00 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | 1.5E-02 | 5.1E-01 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 1.5E+00 | 3.1E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 1.2E+00 | 2.3E+01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 8.5E-01 | 1.6E+01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.6E-01 | 4.2E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | 1.2E-01 | 2.1E+00 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 2.2E-01 | 3.2E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 7.5E-02 | 1.7E+00 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | 2.7E-02 | 6.2E-01 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 4.1E-02 | 9.5E-01 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|-------------------|---------------|-----------------|-------------------------|--------------------------|
| | | | | Field Sample ID | 29 |
| Laboratory Number | 8VA002-29 | | | Sample Description | Leg 29 |
| Extraction Date | 1/24/1999 | | | Sample Date | 1/6/1999 |
| CS ₂ Used in Extraction (mL) | 3 | | | Air Volume (Liters) | 10 |
| Date of Sample receipt | 1/18/1999 | | | Sampling Time (Minutes) | 50 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 029F0101.D | 018F0101.D | 030F0101.D | 019F0101.D | File ID |
| Acquired on | 1/30/1999 17:07 | 2/4/1999 0:10 | 1/30/1999 17:20 | 2/4/1999 0:27 | Acquired on |
| Surrogate Recovery | 75% | 70% | 78% | 77% | Surrogate Recovery |
| Initial Calibration Date | 1/30/1999 | 2/3/1999 | 1/30/1999 | 2/3/1999 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-03-99.SEQ | 01-30-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | 6.9E-02 | 2.9E+00 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | 4.3E-01 | 1.2E+01 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | 3.3E-02 | 9.3E-01 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 2.1E+00 | 4.4E+01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 3.9E+00 | 7.2E+01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 5.9E-01 | 1.1E+01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.9E-01 | 5.0E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 2.6E-01 | 3.8E+00 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | 1.0E-02 | 2.4E-01 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 1.5E-02 | 3.4E-01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | 1.1E-02 | 2.4E-01 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 1.3E-02 | 3.0E-01 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| ****The concentrations of chloroform and 1,1,1-trichloroethane in the front section were obtained from the following dilution analysis. | | | | | |
| | Dilution Analysis | | | | |
| | Front Section | | | | |
| Column | DB-5* | | | | |
| File ID | 015F0101.D | | | | |
| Acquired on | 3/1/1999 17:40 | | | | |
| Initial Calibration Date | 3/1/1999 | | | | |
| Sequence | 03-01-99.SEQ | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|----------------------------|--------------------|--------------|--------------------------|
| | | | Field Sample ID 31 | | |
| Laboratory Number 8VA002-31 | | Sample Description Leg 31 | | | |
| Extraction Date 1/24/99 | | Sample Date 1/6/99 | | | |
| CS ₂ Used in Extraction (mL) 3 | | Air Volume (Liters) 10 | | | |
| Date of Sample receipt 1/18/99 | | Sampling Time (Minutes) 50 | | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 034F0101.D | 022F0101.D | 035F0101.D | 023F0101.D | File ID |
| Acquired on | 1/30/99 18:12 | 2/4/99 1:18 | 1/30/99 18:24 | 2/4/99 1:35 | Acquired on |
| Surrogate Recovery | 67% | 59% | 79% | 87% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-03-99.SEQ | 01-30-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 3.9E-02 | 8.0E-01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 7.8E-02 | 1.4E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 4.2E-02 | 7.8E-01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 1.4E-02 | 3.6E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of samling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|---------------|-------------------------|--------------------------|
| | | | | Field Sample ID | 33 |
| Laboratory Number | 8VA002-33 | | | Sample Description | Leg 33 |
| Extraction Date | 1/24/99 | | | Sample Date | 1/6/99 |
| CS ₂ Used in Extraction (mL) | 3 | | | Air Volume (Liters) | 10 |
| Date of Sample receipt | 1/18/99 | | | Sampling Time (Minutes) | 60 |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 038F0101.D | 024F0101.D | 037F0101.D | 023F0101.D | File ID |
| Acquired on | 1/30/99 18:59 | 2/4/99 1:52 | 1/30/99 18:48 | 2/4/99 1:35 | Acquired on |
| Surrogate Recovery | 62% | 68% | 78% | 69% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-03-99.SEQ | 01-30-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 6.6E-02 | 1.3E+00 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 1.4E-01 | 2.6E+00 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 4.5E-02 | 1.2E+00 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | 4.5E-02 | 8.2E-01 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 5.4E-02 | 8.0E-01 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | 7.2E-03 | 1.7E-01 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 4.5E-02 | 1.0E+00 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | 1.4E-02 | 3.1E-01 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 2.8E-02 | 6.4E-01 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|-----------------------------------|---------------------------|--------------|--------------------------|
| | | | Field Sample ID 34 | | |
| Laboratory Number 8VA002-34 | | Sample Description Leg 34 | | | |
| Extraction Date 1/24/99 | | Sample Date 1/6/99 | | | |
| CS ₂ Used in Extraction (mL) 3 | | Air Volume (Liters) 10 | | | |
| Date of Sample receipt 1/18/99 | | Sampling Time (Minutes) 50 | | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 040F0101.D | 024F0101.D | 037F0101.D | 023F0101.D | File ID |
| Acquired on | 1/30/99 19:24 | 2/4/99 1:52 | 1/30/99 18:48 | 2/4/99 1:35 | Acquired on |
| Surrogate Recovery | 69% | 59% | 86% | 94% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-30-99.SEQ | 02-03-99.SEQ | 01-30-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | <0.0224 | <0.46 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 3.3E-02 | 6.0E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.9E-02 | 3.5E-01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 8.4E-03 | 2.2E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|---------------|---------------------|--------------|--------------------------|
| Laboratory Number | | | Field Sample ID | | |
| 8VA002-36 | | | 36 | | |
| Extraction Date | | | Sample Description | | |
| 1/24/99 | | | Leg 36 | | |
| CS ₂ Used in Extraction (mL) | | | Sample Date | | |
| 3 | | | 1/6/99 | | |
| Date of Sample receipt | | | Air Volume (Liters) | | |
| 1/18/99 | | | 10 | | |
| Sampling Time (Minutes) | | | 50 | | |
| Date of Sample receipt | | | 50 | | |
| 1/18/99 | | | 50 | | |
| | | Front Section | Front Section | Back Section | Back Section |
| Column | | DB-5* | DB-WAX** | DB-5* | DB-WAX** |
| File ID | 002F0101.D | 033F0101.D | 003F0101.D | 034F0101.D | Column |
| Acquired on | 1/30/99 21:00 | 2/4/99 4:25 | 1/30/99 21:10 | 2/4/99 4:41 | File ID |
| Surrogate Recovery | 53% | 55% | 64% | 83% | Acquired on |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Surrogate Recovery |
| Sequence | 01-31-99.SEQ | 02-03-99.SEQ | 01-31-99.SEQ | 02-03-99.SEQ | Initial Calibration Date |
| | | Front Section | Front Section | Back Section | Back Section |
| | | Total Amount | Conc. In*** | Total Amount | Conc. In*** |
| Target Compounds | | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | <0.0224 | <0.46 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.4E-02 | 4.4E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of samling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|-----------------|--------------------------|
| | | | | Field Sample ID | 37 |
| Laboratory Number | 8VA002-37 | | Sample Description | Leg 37 | |
| Extraction Date | 1/24/99 | | Sample Date | 1/6/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 004F0101.D | 035F0101.D | 005F0101.D | 036F0101.D | File ID |
| Acquired on | 1/30/99 21:26 | 2/4/99 4:58 | 1/30/99 21:36 | 2/4/99 5:15 | Acquired on |
| Surrogate Recovery | 55% | 47% | 67% | 56% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-31-99.SEQ | 02-03-99.SEQ | 01-31-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | <0.0224 | <0.46 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 4.5E-02 | 8.2E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|----------------------------|--------------------|--------------|--------------------------|
| | | | Field Sample ID 38 | | |
| Laboratory Number 8VA002-38 | | Sample Description Leg 38 | | | |
| Extraction Date 1/24/99 | | Sample Date 1/6/99 | | | |
| CS ₂ Used in Extraction (mL) 3 | | Air Volume (Liters) 10 | | | |
| Date of Sample receipt 1/18/99 | | Sampling Time (Minutes) 50 | | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 006F0101.D | 037F0101.D | 007F0101.D | 038F0101.D | File ID |
| Acquired on | 1/30/99 21:48 | 2/4/99 6:32 | 1/30/99 22:00 | 2/4/99 5:49 | Acquired on |
| Surrogate Recovery | 59% | 48% | 50% | 40% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-31-99.SEQ | 02-03-99.SEQ | 01-31-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 3.3E-02 | 6.7E-01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 5.1E-02 | 9.3E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | 2.1E-02 | 5.7E-01 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | 4.5E-02 | 6.6E-01 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | 1.6E-02 | 3.7E-01 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | 1.1E-02 | 2.6E-01 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|---------------|----------------------------|--------------|--------------------------|
| | | | Field Sample ID 39 | | |
| Laboratory Number 8VA002-39 | | | Sample Description Leg 39 | | |
| Extraction Date 1/24/99 | | | Sample Date 1/8/99 | | |
| CS ₂ Used in Extraction (mL) 3 | | | Air Volume (Liters) 10 | | |
| Date of Sample receipt 1/18/99 | | | Sampling Time (Minutes) 60 | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 008F0101.D | 040F0101.D | 009F0101.D | 041F0101.D | File ID |
| Acquired on | 1/30/99 22:12 | 2/4/99 6:22 | 1/30/99 22:23 | 2/4/99 6:39 | Acquired on |
| Surrogate Recovery | 58% | 63% | 70% | 68% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-31-99.SEQ | 02-03-99.SEQ | 01-31-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | <0.0224 | <0.46 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 3.3E-02 | 6.0E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|----------------------------|--------------|--------------------------|
| Laboratory Number 8VA002-40 | | | Field Sample ID 40 | | |
| Extraction Date 1/24/99 | | | Sample Description Leg 40 | | |
| CS ₂ Used in Extraction (mL) 3 | | | Sample Date 1/6/99 | | |
| Date of Sample receipt 1/18/99 | | | Air Volume (Liters) 10 | | |
| Date of Sample receipt 1/18/99 | | | Sampling Time (Minutes) 50 | | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 010F0101.D | 042F0101.D | 009F0101.D | 041F0101.D | File ID |
| Acquired on | 1/30/99 22:35 | 2/4/99 6:56 | 1/30/99 22:23 | 2/4/99 6:39 | Acquired on |
| Surrogate Recovery | 44% | 49% | 61% | 68% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-31-99.SEQ | 02-03-99.SEQ | 01-31-99.SEQ | 02-03-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | <0.0224 | <0.46 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | <0.0220 | <0.40 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|--------------|--------------------------|
| | | | Field Sample ID | 42 | |
| Laboratory Number | 8VA002-42 | | Sample Description | Leg 42 | |
| Extraction Date | 1/24/99 | | Sample Date | 1/6/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 1/18/99 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 015F0101.D | 046F0101.D | 016F0101.D | 016F0101.D | File ID |
| Acquired on | 1/30/99 23:34 | 2/4/99 8:03 | 1/30/99 23:45 | 2/2/99 21:11 | Acquired on |
| Surrogate Recovery | 120% | 110% | 63% | 59% | Surrogate Recovery |
| Initial Calibration Date | 1/30/99 | 2/3/99 | 1/30/99 | 2/3/99 | Initial Calibration Date |
| Sequence | 01-31-99.SEQ | 02-03-99.SEQ | 01-31-99.SEQ | 02-02-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. In*** | Total Amount | Conc. In*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | <0.0224 | <0.46 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | <0.0220 | <0.40 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |
| However, all the compounds reported must be confirmed by the other column. | | | | | |

CW-1

| Analytical Result of Charcoal Tube | | | | | |
|---|-----------------|----------------|-----------------|-------------------------|--------------------------|
| Laboratory Number | 8VA004-01 | | | Field Sample ID | CW-1 |
| Extraction Date | 2/4/1999 | | | Sample Description | Combined Flow Week 1 |
| CS ₂ Used in Extraction (mL) | 3 | | | Sample Date | 1/15/1999 |
| Date of Sample receipt | 2/1/1999 | | | Air Volume (Liters) | 10 |
| | | | | Sampling Time (Minutes) | 50 |
| Column | Front Section | Front Section | Back Section | Back Section | Column |
| | DB-5* | DB-WAX** | DB-5* | DB-WAX** | |
| File ID | 009F0101.D | 009F0101.D | 010F0101.D | 010F0101.D | File ID |
| Acquired on | 2/20/1999 20:13 | 2/4/1999 14:45 | 2/20/1999 20:24 | 2/4/1999 15:07 | Acquired on |
| Surrogate Recovery | 62% | 118% | 73% | 118% | Surrogate Recovery |
| Initial Calibration Date | 2/20/1999 | 2/4/1999 | 2/20/1999 | 2/4/1999 | Initial Calibration Date |
| Sequence | 02-18-99.SEQ | 02-04-99.SEQ | 02-18-99.SEQ | 02-04-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 2.6E-02 | 6.4E-01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.6E-02 | 4.8E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | <0.0242 | <0.45 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |

* DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column.
 ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column.
 *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg

1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used.
 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzene, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds.

| Analytical Result of Charcoal Tube | | | | | |
|--|---------------|---------------|-------------------------|----------------------|--------------------------|
| | | | Field Sample ID | CW-2 | |
| Laboratory Number | 8VA004-01 | | Sample Description | Combined Flow Week 2 | |
| Extraction Date | 2/4/99 | | Sample Date | 1/22/99 | |
| CS ₂ Used in Extraction (mL) | 3 | | Air Volume (Liters) | 10 | |
| Date of Sample receipt | 2/1/99 | | Sampling Time (Minutes) | 50 | |
| | Front Section | Front Section | Back Section | Back Section | |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 012F0101.D | 011F0101.D | 013F0101.D | 012F0101.D | File ID |
| Acquired on | 2/20/99 20:48 | 2/4/99 16:25 | 2/20/99 21:00 | 2/4/99 16:43 | Acquired on |
| Surrogate Recovery | 68% | 96% | 56% | 106% | Surrogate Recovery |
| Initial Calibration Date | 2/20/99 | 2/4/99 | 2/20/99 | 2/4/99 | Initial Calibration Date |
| Sequence | 02-18-99.SEQ | 02-04-99.SEQ | 02-18-99.SEQ | 02-04-99.SEQ | |
| | Front Section | Front Section | Back Section | Back Section | |
| | Total Amount | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 1.5E-02 | 3.0E-01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 2.3E-02 | 4.2E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 1.4E-02 | 2.7E-01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of sampling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzene, and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

| Analytical Result of Charcoal Tube | | | | | |
|---|---------------|---------------|-------------------------|--------------|--------------------------|
| Laboratory Number | | | Field Sample ID | | |
| 8VA004-01 | | | CW-3 | | |
| Extraction Date | | | Sample Description | | |
| 2/4/99 | | | Combined Flow Week 3 | | |
| CS ₂ Used in Extraction (mL) | | | Sample Date | | |
| 3 | | | 1/29/99 | | |
| Date of Sample receipt | | | Air Volume (Liters) | | |
| 2/1/99 | | | 10 | | |
| Date of Sample receipt | | | Sampling Time (Minutes) | | |
| 2/1/99 | | | 60 | | |
| Front Section | | Front Section | Back Section | Back Section | Column |
| Column | DB-5* | DB-WAX** | DB-5* | DB-WAX** | Column |
| File ID | 014F0101.D | 013F0101.D | 015F0101.D | 014F0101.D | File ID |
| Acquired on | 2/20/99 21:12 | 2/4/99 16:01 | 2/20/99 21:23 | 2/4/99 16:18 | Acquired on |
| Surrogate Recovery | 65% | 111% | 74% | 106% | Surrogate Recovery |
| Initial Calibration Date | 2/20/99 | 2/4/99 | 2/20/99 | 2/4/99 | Initial Calibration Date |
| Sequence | 02-18-99.SEQ | 02-04-99.SEQ | 02-18-99.SEQ | 02-04-99.SEQ | |
| Front Section | | Front Section | Back Section | Back Section | |
| Total Amount | | Conc. in*** | Total Amount | Conc. in*** | |
| Target Compounds | Per Tube, mg | ppm (v/v) | Per Tube, mg | ppm (v/v) | Target Compounds |
| ACETONE | <0.0082 | <0.35 | <0.0082 | <0.35 | ACETONE |
| 1,1-DICHLOROETHENE | <0.0118 | <0.30 | <0.0118 | <0.30 | 1,1-DICHLOROETHENE |
| METHYLENE CHLORIDE | <0.0220 | <0.63 | <0.0220 | <0.63 | METHYLENE CHLORIDE |
| 1,1-DICHLOROETHANE | <0.0128 | <0.36 | <0.0128 | <0.36 | 1,1-DICHLOROETHANE |
| MEK | <0.0088 | <0.30 | <0.0088 | <0.30 | MEK |
| CHLOROFORM | 2.7E-02 | 5.5E-01 | <0.0224 | <0.46 | CHLOROFORM |
| 1,1,1-TRICHLOROETHANE | 4.6E-02 | 8.2E-01 | <0.0220 | <0.40 | 1,1,1-TRICHLOROETHANE |
| TRICHLOROETHYLENE | 3.3E-02 | 6.1E-01 | <0.0242 | <0.45 | TRICHLOROETHYLENE |
| MIBK | <0.0090 | <0.22 | <0.0090 | <0.22 | MIBK |
| TOLUENE | <0.0078 | <0.21 | <0.0078 | <0.21 | TOLUENE |
| 1,1,2-TRICHLOROETHANE | <0.0216 | <0.40 | <0.0216 | <0.40 | 1,1,2-TRICHLOROETHANE |
| TETRACHLOROETHENE | <0.0416 | <0.61 | <0.0416 | <0.61 | TETRACHLOROETHENE |
| CHLOROBENZENE | <0.0136 | <0.30 | <0.0136 | <0.30 | CHLOROBENZENE |
| ETHYLBENZENE | <0.0056 | <0.13 | <0.0056 | <0.13 | ETHYLBENZENE |
| M-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | M-XYLENES |
| P-XYLENES | <0.0088 | <0.20 | <0.0088 | <0.20 | P-XYLENES |
| O-XYLENE | <0.0088 | <0.20 | <0.0088 | <0.20 | O-XYLENE |
| * DB-5 column is a 30 meter long, 0.53 mm OD 1.5um DB-5ms film thickness megabore column. | | | | | |
| ** DB-WAX is a 30 meters long, 0.53mm OD 1.5um DB-WAX film thickness megabore column. | | | | | |
| *** The conc. in ppm (v/v) is based on the assumption that the temperature of samling is 25°C and pressure 760mmHg. | | | | | |
| 1. The lowest calibration curve is 2.5ng/uL, which is the detection limit used. | | | | | |
| 2. DB-WAX was used to quantitate methylene chloride, chlorobenzene, ethylbenzene, m, p and o-xylenes only. | | | | | |
| Since methylene chloride eludes very close to carbon disulfide, chlorobenzene coeludes with ethylbenzen, | | | | | |
| and p-xylene and m-xylene coelude each other in DB-5 column. DB-5 quantitates the rest of compounds. | | | | | |

Appendix B

Detailed Phenol Analytical Results

OSHA METHOD 32 RESULTS

Client Name : Versar, Inc.
 Project Name : EEC Site
 Client Contact : Charles Gaffney
 Project # : N/A
 C-O-C #: N/A

Date Sampled : 01/07 & 08/99
 Date Received : 01/18/99
 Date Extracted : 01/27/99
 Date Analyzed : 01/29/99

Sequence#: 012999B

| Client ID #: | 1: Leg 1 | | 2: Leg 2 | | 3: Leg 3 | | 4: Leg 4 | | 5: Leg 5 | | 6: Leg 6 | | PQL | CRL | MDL |
|--------------|------------|----|------------|----|------------|----|------------|----|------------|----|------------|----|-----------|-----------|-----------|
| Lab ID #: | 8VA003-01 | | 8VA003-02 | | 8VA003-03 | | 8VA003-04 | | 8VA003-05 | | 8VA003-06 | | Mg / Tube | Mg / Tube | Mg / Tube |
| Data File #: | 105-0101.D | | 106-0101.D | | 107-0101.D | | 108-0101.D | | 109-0101.D | | 110-0101.D | | 8.00E-04 | 5.00E-04 | 1.26E-04 |
| | Result | | Result | | Result | | Result | | Result | | Result | | | | |
| | Mg / Tube | | Mg / Tube | | Mg / Tube | | Mg / Tube | | Mg / Tube | | Mg / Tube | | | | |
| ANALYTE | DF | DF | PQL | CRL | MDL |
| Phenol | 1 | ND | ppmv* | ppmv* | ppmv* |
| | | | | | | | | | | | | | 0.021 | 0.013 | 0.0033 |

| Client ID #: | 7: Leg 7 | | 8: Leg 8 | | 9: Leg 9 | | 10: Leg 10 | | 11: Leg 11 | | 12: Leg 12 | | PQL | CRL | MDL |
|--------------|------------|----|------------|----|------------|----|------------|----|------------|----|------------|----|-----------|-----------|-----------|
| Lab ID #: | 8VA003-07 | | 8VA003-08 | | 8VA003-09 | | 8VA003-10 | | 8VA003-11 | | 8VA003-12 | | Mg / Tube | Mg / Tube | Mg / Tube |
| Data File #: | 111-0101.D | | 112-0101.D | | 113-0101.D | | 114-0101.D | | 118-0101.D | | 119-0101.D | | 8.00E-04 | 5.00E-04 | 1.26E-04 |
| | Result | | Result | | Result | | Result | | Result | | Result | | | | |
| | Mg / Tube | | Mg / Tube | | Mg / Tube | | Mg / Tube | | Mg / Tube | | Mg / Tube | | | | |
| ANALYTE | DF | DF | PQL | CRL | MDL |
| Phenol | 1 | ND | ppmv* | ppmv* | ppmv* |
| | | | | | | | | | | | | | 0.021 | 0.013 | 0.0033 |

DF- Dilution Factor

*The concentration is calculated by ideal gas law, PV=NRT. During sampling, we assume that the pressure, P, is 1 atm, the volume, V, 10 liters air sampled and ambient temperature, T, 298°K. N is the mole number of phenol and calculated by dividing weight of phenol by its molecular weight, which is 94.

Reporting Parameters: Values greater than or equal to the Certified Reporting Limit (CRL), but less than or equal to the highest calibration point are reported. Lowest values reported fall between the Practical Quantitation Limit (PQL) and the CRL. The CRL is greater than the Method Detection Limit (MDL) and is the lowest calibration point. Therefore, values between the MDL and CRL are reported as Not Detected (ND).

[Calculation Note: (ug/ml x 2mb) / 1000ug/mg) = # mg]

Chemist: Alfred Biggs

ONSITE ENVIRONMENTAL LABORATORIES, INC.

OSHA32Q XLS

OSHA METHOD 32 RESULTS

Client Name : Versar, Inc.
 Project Name : EEC Site
 Client Contact : Charles Gaffney
 Project # : N/A
 C-O-C #: N/A

Date Sampled : 01/08/99
 Date Received : 01/18/99
 Date Extracted : 01/27/99
 Date Analyzed : 01/30/99

Sequence#: 012999B

| Client ID #: | 13: Leg 13 | 14: Leg 14 | 15: Leg 15 | 16: Leg 16 | 17: Leg 17 | 18: Leg 18 | PQL | CRL | MDL |
|----------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| Lab ID #: | 8VA003-13 | 8VA003-14 | 8VA003-15 | 8VA003-16 | 8VA003-17 | 8VA003-18 | Mg / Tube | Mg / Tube | Mg / Tube |
| Data File #: | 120-0101.D | 121-0101.D | 122-0101.D | 123-0101.D | 124-0101.D | 125-0101.D | 8.00E-04 | 5.00E-04 | 1.26E-04 |
| | Result | Result | Result | Result | Result | Result | | | |
| | Mg / Tube | | | |
| | DF | DF | DF | DF | DF | DF | | | |
| ANALYTE | | | | | | | | | |
| Phenol | 1 ND | PQL | CRL | MDL |
| | | | | | | | ppmv* | ppmv* | ppmv* |
| | | | | | | | 0.021 | 0.013 | 0.0033 |

| Client ID #: | 19: Leg 19 | 20: Leg 20 | 21: Leg 21 | 22: Leg 22 | 23: Leg 23 | 24: Leg 24 | PQL | CRL | MDL |
|--------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| Lab ID #: | 8VA003-19 | 8VA003-20 | 8VA003-21 | 8VA003-22 | 8VA003-23 | 8VA003-24 | Mg / Tube | Mg / Tube | Mg / Tube |
| Data File #: | 126-0101.D | 127-0101.D | 131-0101.D | 132-0101.D | 133-0101.D | 134-0101.D | 8.00E-04 | 5.00E-04 | 1.26E-04 |
| | Result | Result | Result | Result | Result | Result | | | |
| | Mg / Tube | | | |
| | DF | DF | DF | DF | DF | DF | | | |
| Phenol | 1 ND | PQL | CRL | MDL |
| | | | | | | | ppmv* | ppmv* | ppmv* |
| | | | | | | | 0.021 | 0.013 | 0.0033 |

*The concentration is calculated by ideal gas law, PV=NRT. During sampling, we assume that the pressure, P, is 1 atm, the volume, V, 10 liters air sampled and ambient temperature, T, 298°K. N is the mole number of phenol and calculated by dividing weight of phenol by its molecular weight, which is 94.
 DF- Dilution Factor

Reporting Parameters: Values greater than or equal to the Certified Reporting Limit (CRL), but less than or equal to the highest calibration point are reported. Lowest values reported fall between the Practical Quantitation Limit (PQL) and the CRL. The CRL is greater than the Method Detection Limit (MDL) and is the lowest calibration point. Therefore, values between the MDL and CRL are reported as Not Detected (ND).

[Calculation Note: (Mg/ml x 2ml) / (1000mg) = 2 mg]

Chemist: Alfred Biggs

ONSITE ENVIRONMENTAL LABORATORY

OSHA32Q.XLS

OSHA METHOD 32 RESULTS

Client Name : Versar, Inc.
 Project Name : EEC Site
 Client Contact : Charles Gaffney
 Project # : N/A
 C-O-C #: N/A

Date Sampled : 01/08/99
 Date Received : 01/18/99
 Date Extracted : 01/27/99
 Date Analyzed : 01/30/99

Sequence#: 012999B

| Client ID #: | 25 : Leg 25 | 26 : Leg 26 | 27 : Leg 27 | 28 : Leg 28 | 29 : Leg 29 | 30 : Leg 30 | PQL | CRL | MDL | | | | | | |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|-----------|----------|---|----|-------|-------|--------|
| Lab ID #: | 8VA003-25 | 8VA003-26 | 8VA003-27 | 8VA003-28 | 8VA003-29 | 8VA003-30 | Mg / Tube | Mg / Tube | Mg / Tube | | | | | | |
| Data File #: | 135-0101.D | 136-0101.D | 137-0101.D | 138-0101.D | 139-0101.D | 140-0101.D | 8.00E-04 | 5.00E-04 | 1.26E-04 | | | | | | |
| | Result | Result | Result | Result | Result | Result | | | | | | | | | |
| | Mg / Tube | | | | | | | | | |
| | DF | DF | DF | DF | DF | DF | | | | | | | | | |
| ANALYTE | | | | | | | | | | | | | | | |
| Phenol | 1 | ND | 1 | ND | 1 | 5.96E-04 | 1 | ND | 1 | 7.80E-04 | 1 | ND | PQL | CRL | MDL |
| | | | | | | 0.015 | | | | 0.020 | | | ppmv* | ppmv* | ppmv* |
| | | | | | | | | | | | | | 0.021 | 0.013 | 0.0033 |

| Client ID #: | 31 : Leg 31 | 32 : Leg 32 | 33 : Leg 33 | 34 : Leg 34 | 35 : Leg 35 | 36 : Leg 36 | PQL | CRL | MDL | | | | | | |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|-----------|----|---|----------|-------|-------|--------|
| Lab ID #: | 8VA003-31 | 8VA003-32 | 8VA003-33 | 8VA003-34 | 8VA003-35 | 8VA003-36 | Mg / Tube | Mg / Tube | Mg / Tube | | | | | | |
| Data File #: | 144-0101.D | 145-0101.D | 146-0101.D | 147-0101.D | 148-0101.D | 149-0101.D | 8.00E-04 | 5.00E-04 | 1.26E-04 | | | | | | |
| | Result | Result | Result | Result | Result | Result | | | | | | | | | |
| | Mg / Tube | | | | | | | | | |
| | DF | DF | DF | DF | DF | DF | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Phenol | 1 | ND | 1 | 7.34E-04 | 1 | 7.36E-04 | 1 | 5.74E-04 | 1 | ND | 1 | 1.64E-03 | PQL | CRL | MDL |
| | | | | 0.019 | | 0.019 | | 0.015 | | | | 0.043 | ppmv* | ppmv* | ppmv* |
| | | | | | | | | | | | | | 0.021 | 0.013 | 0.0033 |

*The concentration is calculated by ideal gas law, PV=NRT. During sampling, we assume that the pressure, P, is 1 atm, the volume, V, 10 liters air sampled and ambient temperature, T, 298°K. N is the mole number of phenol and calculated by dividing weight of phenol by its molecular weight, which is 94.
 DF- Dilution Factor

Reporting Parameters : Values greater than or equal to the Certified Reporting Limit (CRL), but less than or equal to the highest calibration point are reported. Lowest values reported fall between the Practical Quantitation Limit (PQL) and the CRL. The CRL is greater than the Method Detection Limit (MDL) and is the lowest calibration point. Therefore, values between the MDL and CRL are reported as Not Detected (ND).

[Calculation Note : (ppmv) x 2.2) / 1000(ug/mg) = # ug]

Chemist: Alfred Biggs

ONSITE ENVIRONMENTAL LABORATORIES, INC.

OSHA32Q.XLS

OSHA METHOD 32 RESULTS

Client Name : Versar, Inc.
 Project Name : EEC Site
 Client Contact : Charles Gaffney
 Project # : N/A
 C-O-C # : N/A

Date Sampled : 01/05, 06, 07, 08, 09, 10 and 11/99
 Date Received : 01/18/99
 Date Extracted : 01/27/99
 Date Analyzed : 01/30/99

Sequence#: 012999B

| Client ID # : | 37 : Leg 37 | 38 : Leg 38 | 39 : Leg 39 | 40 : Leg 40 | 41 : Leg 41 | 42 : Leg 42 | C-1 | PQL | CRL | MDL |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-----------|-----------|-----------|
| Lab ID # : | 8VA003-37 | 8VA003-38 | 8VA003-39 | 8VA003-40 | 8VA003-41 | 8VA003-42 | 8VA003-43 | Mg / Tube | Mg / Tube | Mg / Tube |
| Data File # : | 150-0101.D | 151-0101.D | 152-0101.D | 153-0101.D | 157-0101.D | 158-0101.D | 159-0101.D | 8.00E-04 | 5.00E-04 | 1.26E-04 |
| Result | | | | | | | | | | |
| Mg / Tube | | | | | | | | | | |
| DF | DF | DF | DF | DF | DF | DF | DF | | | |
| ANALYTE | | | | | | | | | | |
| Phenol | 1 ND | 1 ND | 1 5.98E-04 | 1 7.78E-04 | 1 ND | 1 ND | ND | PQL | CRL | MDL |
| | | | 0.016 | 0.020 | | | | ppmv* | ppmv* | ppmv* |
| | | | | | | | | 0.021 | 0.013 | 0.0033 |

| Client ID # : | C-2 | C-3 | C-4 | C-5 | C-6 | C-7 | Blank | PQL | CRL | MDL |
|---------------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|
| Lab ID # : | VA003-44 | VA003-45 | VA003-46 | VA003-47 | VA003-48 | VA003-49 | VA003-50 | Mg / Tube | Mg / Tube | Mg / Tube |
| Data File # : | 160-0101.D | 161-0101.D | 162-0101.D | 163-0101.D | 164-0101.D | 165-0101.D | 166-0101.D | 8.00E-04 | 5.00E-04 | 1.26E-04 |
| Result | | | | | | | | | | |
| Mg / Tube | | | | | | | | | | |
| DF | DF | DF | DF | DF | DF | DF | DF | | | |
| ANALYTE | | | | | | | | | | |
| Phenol | 1 ND | 1 ND | 1 6.64E-04 | 1 8.30E-04 | 1 ND | 1 ND | 1 ND | PQL | CRL | MDL |
| | | | 0.017 | 0.022 | | | | ppmv* | ppmv* | ppmv* |
| | | | | | | | | 0.021 | 0.013 | 0.0033 |

*The concentration is calculated by ideal gas law, PV=NRT. During sampling, we assume that the pressure, P, is 1 atm, the volume, V, 10 liters air sampled and ambient temperature, T, 298°K. N is the mole number of phenol and calculated by dividing weight of phenol by its molecular weight, which is 94.
 DF- Dilution Factor

Reporting Parameters : Values greater than or equal to the Certified Reporting Limit (CRL), but less than or equal to the highest calibration point are reported. Lowest values reported fall between the Practical Quantitation Limit (PQL) and the CRL. The CRL is greater than the Method Detection Limit (MDL) and is the lowest calibration point. Therefore, values between the MDL and CRL are reported as Not Detected (ND).

(Calculation Note: (Signal x Jx) / (1000mg) = # mg)

Chemist: Alfred Biggs

ONSITE ENVIRONMENTAL LABORATORY, INC.

OSHA32Q.XLS

OSHA METHOD 32 RESULTS

Client Name : **Versar, Inc.**
 Project Name : **EEC Site**
 Client Contact : **Charles Gaffney**
 Project # : **N/A**
 C-O-C # : **N/A**

Date Sampled : 1/15, 22 and 29/1999
 Date Received : 02/01/99
 Date Extracted : 02/04/99
 Date Analyzed : 02/21/99

Sequence#: 022199 S

| Client ID #: | CW-1 | | CW-2 | | CW-3 | | | PQL | CRL | MDL |
|----------------|------------|----|------------|----|------------|----|---|-----------|-----------|-----------|
| Lab ID #: | 8VA004-04 | | 8VA004-05 | | 8VA004-06 | | | Mg / Tube | Mg / Tube | Mg / Tube |
| Data File #: | 114-0101.D | | 115-0101.D | | 116-0101.D | | | 8.00E-04 | 5.00E-04 | 1.26E-04 |
| | Result | | Result | | Result | | | | | |
| | Mg / Tube | | Mg / Tube | | Mg / Tube | | | | | |
| | DF | | DF | | DF | | | | | |
| <u>ANALYTE</u> | | | | | | | | | | |
| Phenol | 1 | ND | 1 | ND | 1 | ND | 1 | PQL | CRL | MDL |
| | | | | | | | | ppmv* | ppmv* | ppmv* |
| | | | | | | | | 0.021 | 0.013 | 0.0033 |

*The concentration is calculated by ideal gas law, PV=NRT. During sampling, we assume that the pressure, P, is 1 atm, the volume, V, 10 liters air sampled and ambient temperature, T, 298°K. N is the mole number of phenol and calculated by dividing weight of phenol by its molecular weight, which is 94.
 DF- Dilution Factor

Reporting Parameters: Values greater than or equal to the Certified Reporting Limit (CRL), but less than or equal to the highest calibration point are reported. Lowest values reported fall between the Practical Quantitation Limit (PQL) and the CRL. The CRL is greater than the Method Detection Limit (MDL) and is the lowest calibration point. Therefore, values between the MDL and CRL are reported as Not Detected (ND).

[Calculation Note: (Weight x 200) / 1000(mg) = # mg]

Chemist: Alfred Biggs

ONSITE ENVIRONMENTAL LABORATORY, INC.

OSHA32Q.XLS